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10/008,423	11/13/2001	Andrew R. Ferlitsch	10237.12	3540

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KIRTON & MCCONKIE

1800 EAGLE GATE TOWER / 60 EAST SOUTH TEMPLE

P.O. BOX 45120

SALT LAKE CITY, UT 84145-0120

EXAMINER

DIVECHA, KAMAL B

ART UNIT

PAPER NUMBER

2151

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/008,423

Applicant(s)

FERLITSCH, ANDREW R.

Examiner

KAMAL B. DIVECHA

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

**Response to Arguments**

Claims 1-10, 12-17, 20, 21, 24-29, 33-39 are pending in this application.

Claims 11, 16-19, 22, 23, 30-32 have been cancelled.

Applicant's arguments filed October 13, 2006 have been fully considered but they are not persuasive.

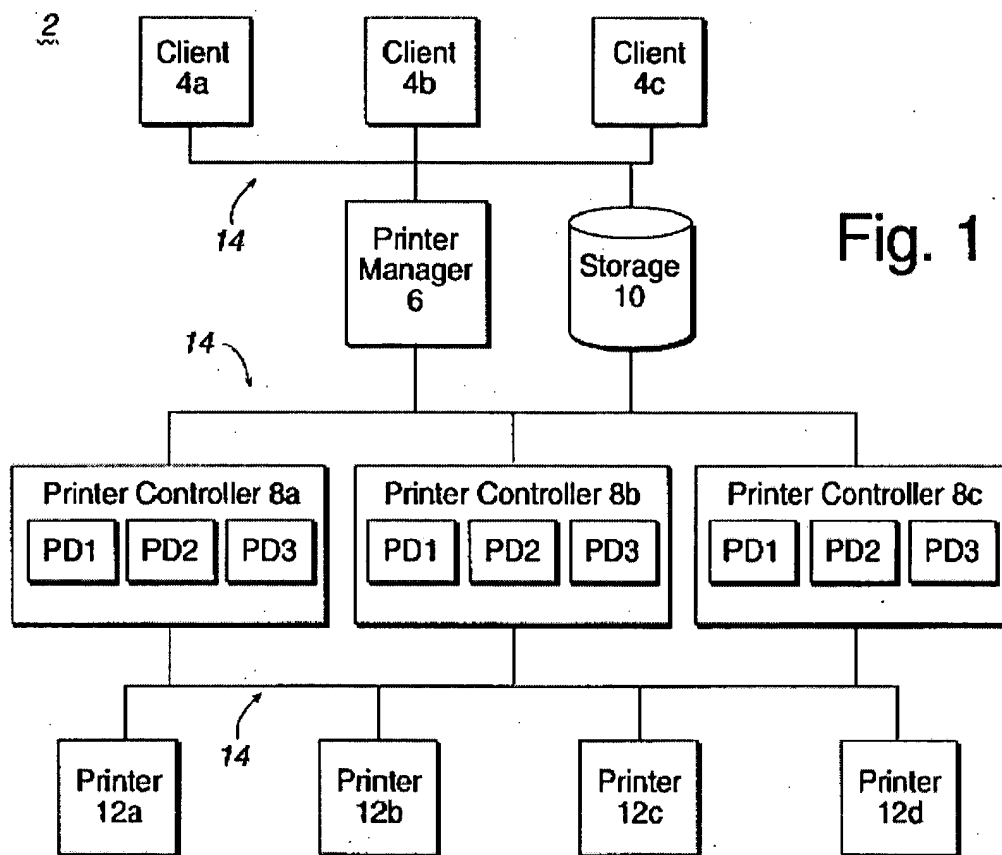
a. Mastie does not teach each of the limitations contained in claim 1 above. In particular, while claim 1 specifically claims that the management of the print jobs occurs without a print server, Mastie is explicitly clear that a print server is used (remarks, page 15, page 18).

In response to argument [a], Examiner respectfully disagrees.

**A Print Server**

A print server is a centrally located computer system that distributes and manages the print jobs.

Examiner respectfully agrees with the applicant's assertion that Mastie teaches the usage of the print server, however, in an alternative embodiment, Mastie teaches, "functions performed by the printer manager 6 may be implemented within one or more printer controllers 8a, b, c. Moreover, each printer controllers 8a, b, c, may be capable of implementing more or fewer print daemons that the three print daemons illustrated in the preferred embodiment. In yet further embodiments, the printer manager 6 and printer controllers 8a, b, c may be implemented as software programs within a single server or within the printer unit" (col. 9 L5-16), in which case, there will be no print server, since the functions performed by the printer manager are implemented, as software programs, on the printer units.



Consider the figure above and the teachings disclosed by the alternative embodiment of Mastie, wherein the functions performed by the printer controller 8a, b, c, and printer manager 6, are implemented as the software programs, in the printer unit 12a, b, c, d.

What is clear from this implementation is that there will be no print server, in which case, the management of the print jobs occurs without Print server.

Furthermore, in the presently claimed invention, a client computer device manages the functions usually implemented by a centrally located print server, therefore, a client computer system with local print queue and a local printer manager, can be interpreted as a print server, in which case the claimed invention will be incompatible, because initially the claimed invention

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discloses managing the print jobs without using the print server without defining a print server and on the other hand, implementing a computer system with all the functions of the print server, in which case print server is being utilized.

b. Furthermore, claim 1 also requires a local print queue manager “in a local print subsystem of the corresponding client computer device” (remarks, page 15).

In response to argument [b], Examiner respectfully disagrees.

In addition to above teachings, it is fairly known in the art that when a client computer system is connected to a printer, the system including client computer system and a printer is said to include a print queue, print queue manager, a spooler, a print processor, and a print assist in a print subsystem and/or a print driver because these are the major components for performing printing functions.

In an alternative embodiment, as disclosed by Mastie, and as set forth above, a client computer system is locally connected to a plurality of other clients and the printers (See fig. 1 and col. 9 L6-15).

As such, Mastie does disclose a print driver and/or a local print queue manager in a local print subsystem of the corresponding client computer device.

Furthermore, the claim recites:

A network system that provides for ...and wherein each client computer device includes a local print queue and a local print queue manager, wherein the local print queue manager is one of (i) a spooler, (ii) a print processor, and (iii) a print assist in a local print subsystem of the corresponding client computer device...”.

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In view of the context of the claim above, there is no such requirement, as argued by the applicant above, of requiring a local print queue manager in a local print subsystem of the corresponding client computer device, simply because the claim teaches that the local print queue manager is one of spooler, print processor and print assist.

Also note that the phrase “local” can be interpreted in several ways such as local with respect to LAN, etc., i.e. every devices connected in a LAN is considered local to each other.

c. Claim 1 also requires a broadcast message of information sent from a print queue manager of a first client computer device to a second client computer device across the network. Mastie does not teach this limitation (remarks, page 16).

In response to argument [c], Examiner respectfully disagrees.

As set forth above, Mastie teaches the system wherein the functions performed by the printer manager and print controller may be implemented as software programs within a single server or within the printer unit.

Furthermore, Mastie teaches the process of querying the printers, i.e. a server or a printer unit, in order to determine the status of the printers or server (col. 7 L48-67, fig. 3).

Querying a printer or a server including a printer controller and a printer manager, across the network, is equivalent (i.e. interpretation) to sending a broadcast message of information from a first client computer that includes a queue manager to a second client computer device across the network, as this interpretation can be evidenced by applicant’s claim 7, which recites “a system as recited in claim 1, wherein broadcast message indicates intent to get a current status for the printing device”.

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Therefore, applicant's argument directed towards the distinction between the prior art and the claimed invention, based on the features above, are not persuasive, and the REJECTION IS MAINTAINED.

### **DETAILED ACTION**

#### **Specification**

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to adequately teach how to make and use the invention, i.e., failing to provide an enabling disclosure.

The test to be applied under the written description portion of 35 U.S.C. § 112, first paragraph, is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of later claimed subject matter. Vas-Cat, Inc. v. Mahurkar, 935 F. 2d 1555, 1565, 19 USPQ2d 111, 1118 (Fed. Cir. 1991), reh'rg denied (Fed. Cir. July 8, 1991) and reh'rg, en banc, denied (Fed. Cir. July 29, 1991).

The applicants have failed to provide an enabling disclosure in the detailed description of the embodiment. The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to support the subject matter set forth in these claims.

Claim 29 recites a computer program...determining...and determining...and if no response to the broadcast is received, using the first client computer device to manage the print job.

The specification fails to teach process wherein the step of determining whether the response includes a conflict...and determining whether the response includes an objection...and

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further if no response to the broadcast is received, using the first client computer device to manage the print job.

The specification merely teaches the process wherein it is determined whether the response received includes a conflict or objection (see applicant specification, page 21) and the process wherein client receiving the broadcast responds accordingly, which may include no response (page 27 of applicant's specification).

The specification teaches "the response provided at step 78 may indicate (1) that the receiving client has no objection...(2) that the receiving client denies the immediate despooling...(3) that a conflict must be resolved in order to provide an immediate ... (specification, page 18 line 3-21)"

There is simply no teaching whatsoever of the fact "wherein said distributively managing the print job comprises if a response to the broadcast is received, performing the steps of: determining whether the response includes a conflict from the client computer device to despool the print data to the printing device, wherein if the conflict is included in the response, resolving the conflict; and determining whether the response includes an objection from the client computer device to despool data to the printing device, wherein if the objection is included in the response, resolving the objection..."

The specification fails to teach, disclose or suggest that the "objection" and "conflict" are indeed distinct and are resolved distinctly.

Hence, the amended claim limitation presents subject matter that was not described in the specification in such way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.



**Claim Rejections - 35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, for the same reasons as set forth in objection to specification.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8, 12-17, 20, 21, 24-29, 33 and 35-39 are rejected under 35 U.S.C. 102(e) as anticipated by Mastie et al (hereinafter Mastie, U. S. Patent No.: 6,498,656 B1).

As per claim 1, Mastie discloses a system that provides for distributive management of print job without the use of print server, the system comprising:

a network (fig. 1);

a plurality of client computer devices connected to the network, wherein the plurality of client computer devices are configured to participate in the distributive management of the print job and a prioritization of the print job without use of a print server, including bi-directional communication across the network; and wherein each client computer device includes a local print queue and a local print queue manager, wherein the local queue manager is one of a

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spooler, a print processor and a print assist in a local print subsystem of the corresponding client computer device (fig. 1, fig. 2a-2c, col. 1 L21 to col. 2 L 39);

a printing device for processing a print job initiated at one of the plurality of client computer devices, wherein the printing device is connected to the network and corresponds to the print queues of the client computer devices (fig. 1 and fig. 2a-2c, col. 2 L30-34); and

a broadcast message of information about the print job sent from a first queue manager of a first client computer device to a second client computer device across the network as part of the distributive management of the print job to determine which of the client computer devices shall be used to manage the print job, wherein the first and second client computer devices are of the plurality of computer devices (fig. 3 item #31, 32, 34, 40, 46 col. 2 L41-52, col. 3 L64 to col. 4 L35, col. 5 L35-61).

As per claim 2, Mastie discloses a system wherein the broadcast indicates intent of the first client computer device to participate in a distributed management of a print job (fig. 3).

As per claim 3, Mastie discloses a system wherein the broadcast indicates intent to despool print data to the printing device (col. 5 L45-61).

As per claim 4, Mastie discloses a system wherein the broadcast indicates intent to set a status for the print job (col. 10 L60-62).

As per claim 5, Mastie discloses a system wherein the broadcast indicates intent to get a current status for the print job (col. 10 L60-62).

As per claim 6, Mastie discloses a system wherein the broadcast indicates intent to set a status on the printing device (col. 7 L47-60).

As per claim 7, Mastie discloses a system wherein the broadcast indicates intent to get a current status for the printing device (col. 7 L47-60).

As per claim 8, Mastie discloses a system wherein the broadcast provides a request for print queue information (fig. 3 and col. 7 L47-60).

As per claim 12, Mastie discloses a system that includes devices connected to a printing device via a network, a method for managing print job without use of a print server, the method comprising:

initiating a print job at a first client computer device, wherein the first client computer device is one of the client computer devices connected to the printing device via the network, and wherein no print server is connected to the network (fig. 1-fig. 2c and fig. 3 item #30);

placing the print job on a print queue (fig. 3 item #40, 46, 52);

distributively managing the print job and a prioritization of the print job until print data of the print job is despoiled to the printing device, wherein said distributively managing the print job and a prioritization of the print job comprises:

broadcasting information about the print job to a plurality of said client computer devices (fig. 3 item #31, 32, 34, 40, 46 col. 2 L41-52, col. 3 L64 to col. 4 L35, col. 5 L35-61); and

determining which one or more of the plurality of client computer devices shall be used to manage the print job (col. 5 L45-47 and fig. 3);

despooling the print data to the printing device to render the print job (fig. 3 and col. 5L45-60); and

updating the print queue (col. 5 L21-40).

As per claim 13, Mastie discloses a system wherein the step for initiating includes the step for determining whether to perform cluster printing, and wherein if the cluster printing is to be performed, utilizing the printing device in performing the cluster printing (fig. 3).

As per claim 14, Mastie discloses a system wherein the step for initiating includes the step for determining whether to perform intelligent routing, and wherein if the intelligent routing is to be performed, utilizing the printing device in performing the intelligent routing (fig. 3).

As per claim 15, Mastie discloses a system wherein the step for receiving includes the step for determining whether the first response includes a conflict for despooling the print data to the printing device, and wherein if the conflict is included in the first response, performing the step for resolving the conflict (col. 7 L47 to col. 8 L6 and fig. 3).

As per claim 16, Mastie discloses a system for determining whether the first response includes an objection to despooling the print data to the printing device, and wherein if the objection is included in the first response, performing the step for resolving the objection (col. 7 L47 to col. 8 L6 and fig. 3).

As per claim 17, Mastie discloses the process wherein distributively managing the print job comprises: if no response to the broadcast is received, using the first client computer device to manage the print job (col. 7 L47 to col. 8 L6 and fig. 3).

As per claim 20, Mastie discloses the process of utilizing a second broadcast relating to a second print job to determine which of the client computer devices shall be used to manage the second print job and ordering the print jobs on a print queue (fig. 3).

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As per claim 21, Mastie discloses the system wherein distributively managing the print job is enabled by at least one of a print driver; a print assistant and the spooler (fig. 1-2c and col. 1 L23 to col. 2 L33).

As per claim 25, Mastie discloses the process wherein for despooling the print data further includes the steps for: removing the first print job from one or more local print queues; and removing a remote entry of the first print job from a remote print queue (col. 5 L22-67 and fig. 3).

As per claim 26, Mastie discloses the process wherein if the print data corresponding to the first print job is in a printer ready format, the step for despooling the print data further includes the step for using a print processor to send the print data to a port manager (col. 4 L1-21).

As per claim 27, Mastie discloses the process wherein if the print data corresponding to the first print job is in a journaled format (i.e. incompatible), the step for despooling the print data further includes the steps for: using a print processor to play back the journaled data to a printer driver; spooling the print data to a spooler; and sending the print data to a port manager (col. 3 L61 to col. 4 L67).

As per claims 24, 28, 29, 33 and 35-39, they do not teach or further define over the limitations in claims 1-8, 12-17, 20, 21 and 25-27. Therefore claims 24, 28, 29, 33 and 35-39 are rejected for the same reasons as set forth in claims 1-8, 12-17, 20, 21, 25-27.

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9, 10 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mastie et al (hereinafter Mastie, U. S. Patent No.: 6,498,656 B1) in view of Kang (Pub. No. 2003/0160993 A1).

As per claim 9, Mastie does not disclose the process wherein the broadcast message provides a request for a print queue change.

Kang, from the same field of endeavor discloses the process of sending a message requesting a print queue change (fig. 2 item #84, 76).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Mastie in view of Kang in order to change the print queue.

One of ordinary skilled in the art would have been motivated because it would have enabled administrator to manage the print queues [Kang, pg. 3 [0027], [0032]].

As per claim 10, Mastie does not disclose the process wherein the broadcast provides a request for administrative authority.

Kang, from the same field of endeavor, discloses the process wherein the user is granted administrative rights in order move the print jobs (pg. 3 [0032-0034]).

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Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Mastie in view of Kang in order to give the user the appropriate rights.

One of ordinary skilled in the art would have been motivated because it would have enabled user to move or redirect the print job from a source to a target queue (Kang, pg. 3 [0034]).

As per claim 34, Mastie does not disclose the process wherein the broadcast message is used to register a client computer device for distributed management of print jobs.

Kang, from the same field of endeavor discloses the process of registering a client device for distributed management of print jobs (pg. 3 [0034] and fig. 2).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Mastie in view of Kang in order to register client computer devices for distributed management of print jobs.

One of ordinary skilled in the art would have been motivated because it would have enabled management of the print queues (Kang, [0034]).

#### **Additional References**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Cavil, US 6,003,069: Client/Server Printer Driver system.
- b. Leong et al., U. S. Patent No.: 6,687,018 B1.
- c. Al-Kazily et al, U. S. Patent No.: 6,621,589 B1.
- d. Morikawa et al., US 7,027,169 B1: System for Efficiently Distributing Print jobs.

**Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kamal Divecha  
Art Unit 2151  
December 22, 2006.



**ZHEN NIU**  
**SUPERVISORY PATENT EXAMINER**